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published in

Journal of Managerial Psychology
2010

DOI (link to publisher)

[10.1108/02683941011023730](https://doi.org/10.1108/02683941011023730)

[Link to publication in VU Research Portal](#)

citation for published version (APA)

Bal, P. M., Chiaburu, D. S., & Jansen, P. G. W. (2010). Psychological contract breach and work performance: Is social exchange a buffer or an intensifier? *Journal of Managerial Psychology*, 25(3), 252-273.
<https://doi.org/10.1108/02683941011023730>

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Psychological contract breach and work performance

Is social exchange a buffer or an intensifier?

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Abstract

Purpose – The aim of this paper is to investigate how social exchanges modify the relationship between psychological contract breach and work performance. It aims to present two concurrent hypotheses, based on theoretical interaction effects of social exchanges (conceptualized as social exchange relationships, POS, and trust).

Design/methodology/approach – Data were collected from a sample of 266 employees in a service sector company in the USA. Regression analysis was used to explore the moderating effects of social exchanges on the relationships between psychological contract breach and work performance (operationalized as in-role behaviors and organizational citizenship behaviors).

Findings – It was found that the negative relationship between psychological contract breach and work performance was moderated by social exchanges, such that the relationship was stronger for employees with high social exchange relationship, perceived organizational support, and trust.

Research limitations/implications – The data were collected cross-sectionally, and thus causal inferences have to be made with caution. Moreover, the data were collected from a single source. The study shows that the relations between contract breach and outcomes are moderated by the existing relationship between employee and organization.

Practical implications – Although organizations may invest in long-term relationships with their employees, psychological contract breaches have a profound impact on work performance. Therefore, organizations should diminish perceptions of contract breach; for instance by providing realistic expectations.

Originality/value – The paper provides new theoretical insights on how social exchange can have two distinct effects on the breach-outcomes relations. It shows that social exchanges moderate the relations between contract breach and work performance.

Keywords Breach of contract, Social interaction, Performance management, Psychological contracts, Job satisfaction, United States of America

Paper type Research paper



Although previous research has supported the relationship between psychological contract breach and various performance dimensions (e.g. Turnley *et al.*, 2003), the processes through which contract breach leads to work performance has received less empirical attention. Since psychological contracts researchers use social exchanges between the employer and the employees as an explanatory framework, in the current study we examine breach processes from this perspective. Social exchanges (i.e. long-term state variables) between employee and organization may influence how perceptions of contract breach influence subsequent behaviors. Indeed, Aselage and Eisenberger (2003) proposed an integration of organizational support and psychological contract theories. Along similar lines, Guest (1998, p. 660) proposes to “switch the focus much more to [i]ssues such as trust, fairness and exchange”.

The psychological contract refers to “individual beliefs, shaped by the organization, regarding terms of an exchange agreement between the individual and their organization” (Conway and Briner, 2005; Rousseau, 1995, p. 9). Contracts of a psychological nature are typically presented as rooted in social exchange theory, describing mutual exchanges between employees and their organization (Suazo *et al.*, 2009). Psychological contract breach is defined as the cognition that the organization has failed to meet one or more obligations within the scope of the psychological contract whereas the employee has fulfilled his or her obligations (Morrison and Robinson, 1997).

This paper examines how the effects of psychological contract breach on job performance and organizational citizenship behaviors (OCBs) are modified by several perceptions of social exchanges, including social exchange relationships (SER; Shore *et al.*, 1999), perceived organizational support (POS; Eisenberger *et al.*, 1986), and trust in the organization (Robinson and Rousseau, 1994). We develop new theoretical insights on how social exchanges can either have a desensitizing (“buffering”) or sensitizing (“intensifying”) effect on the breach – performance relationship. We contribute to existing knowledge on the consequences of psychological contracts and their relationship with performance (e.g. Turnley *et al.*, 2003) by examining theory-based and heretofore empirically unexamined interactions between contract breach and these forms of social exchange. Moreover, we contribute to existing research by focusing on social exchanges as moderators in the relationships with work behaviors, instead of investigating social exchanges as outcomes or predictors of psychological contract breach (e.g. Dulac *et al.*, 2008; Tekleab *et al.*, 2004).

Psychological contract breach and work performance

Psychological contract breach is negatively related to work performance (Turnley *et al.*, 2003; Zhao *et al.*, 2007). Consistent with prior work, we examine two types of work performance: job performance (in-role) and organizational citizenship behaviors (extra-role; OCBs; Organ, 1988; Williams and Anderson, 1991). Employees and employers engage in exchanges in which each party reciprocates the other’s contributions (Blau, 1964). According to the norm of reciprocity (Gouldner, 1960), when employers do not fulfill their promises and obligations, the employee reciprocates by altering his or her contributions to the organization (e.g. by reducing their efforts and performance). Thus, psychological contract breach is expected to be negatively related to employee job performance. Moreover, when the organization fulfills its promised obligations, employees may be motivated and engage in discretionary behaviors, including increased effort and organizational citizenship (OCBs; Coyle-Shapiro, 2002;

Turnley *et al.*, 2003). Conversely, contract breach may adversely impact organizational citizenship. In sum and consistent with previous research, we expect that psychological contract breach is negatively related to job performance and organizational citizenship behaviors, presented formally in our first hypothesis.

H1a. Psychological contract breach will be negatively related to job performance.

H1b. Psychological contract breach will be negatively related to organizational citizenship behaviors (OCBs).

Social exchange as a moderator between contract breach and work performance

Social exchange may function as moderator in the relations between contract breach and work performance. Indeed, previous work demonstrated that not all individuals react equally to contract breaches (Coyle-Shapiro, 2002; Restubog and Bordia, 2006). For example, high-perceived justice may attenuate the relations between breach and outcomes. In the current study, we examine how differences in social exchange between individuals influence the effects of breach. Social exchange refers to the social interactions between employee and organization, potentially generating high-quality long-term relationships between employee and organization (Cropanzano and Mitchell, 2005). Specifically, we propose that high-quality relationships may sensitize or desensitize a person to negative effects of contract breach on work performance.

In this study, three different constructs within the overarching social exchange construct are investigated: social exchange relationships (SER; Shore *et al.*, 2006), perceived organizational support (POS; Aselage and Eisenberger, 2003), and trust in the organization (Dirks and Ferrin, 2002; Dunn and Schweitzer, 2005). Although they are all related to the overarching concept of organization – employee social exchanges, they are conceptually distinct and previous studies have shown their distinctiveness through construct validity examinations (Aselage and Eisenberger, 2003; Blau, 1964; Shore *et al.*, 2004, 2006; Tekleab and Chiaburu, 2004; Wayne *et al.*, 1997).

For example, while perceived organizational support (POS) focuses on global beliefs about the support received from the organization, psychological contract breach describes perceptions of unfulfilled obligations by the organization or its agents (Aselage and Eisenberger, 2003; Coyle-Shapiro and Conway, 2005; Suazo *et al.*, 2009). From another direction, trust in the organization captures perceptions of one's integrity and dependability based on past events (Robinson, 1996). Furthermore, social exchange relationships (SER) refer to the strength of the socio-emotional aspects exchanged by the employee and the organization (Shore *et al.*, 2004, 2006). We focus on these forms of social exchange in response to recent calls for empirical integration (e.g. Aselage and Eisenberger, 2003; Guest, 2004; Shore *et al.*, 2006). More importantly, our goal is to empirically test whether our theoretical propositions hold across various forms of exchange. Social exchange, perceived organizational support, and trust are correlated with each other (e.g. Dirks and Ferrin, 2002); however, all three constructs refer to different types of social exchange between employee and organization (Shore *et al.*, 2006).

We propose two competing interaction effects (buffering vs. intensifying), both stemming from existing theory. According to the buffering-hypothesis, the negative relationship between contract breach and work behaviors will be reduced for people having high-quality social exchange relationships. These employees perceive breaches

as less severe and less intentional (Morrison and Robinson, 1997; Rousseau, 1995), precisely because of the high quality of exchanges with their organizations. For instance, employees with high levels of trust in their employer may attribute contract breaches to circumstances, rather than to the organization itself (Morrison and Robinson, 1997; Turnley and Feldman, 1999b), consistent with the idea that individuals prefer to form causal explanations consistent with existing beliefs. Since contract breach is inconsistent with the high trust in the organization, people will use an interpretive filter and think about the breach in a way that is consistent with their high levels of trust (Robinson, 1996). Furthermore, employees with low social exchanges will react more strongly to contract breaches because they lack the means to buffer the negative feelings associated with contract breach (Morrison and Robinson, 1997). Thus, the negative relationship between contract breach and work performance will be attenuated for individuals with high social exchanges.

We present this hypothetical relationship in Figure 1. The slope across low and high levels of contract breach is assumed to be essentially flat for high social exchange employees: the decrease in performance for these individuals should be minimal. Conversely, the slope of the low social exchange employees (across the same low and high levels of breach) should be strongly negative: these employees will exhibit a sharp decrease in performance. Empirical evidence for the buffering hypothesis stems from several studies (e.g. Bakker *et al.*, 2007; Erdogan *et al.*, 2004). For example, Erdogan *et al.* (2004) found that employees with high POS and LMX reported high (job and career) satisfaction, both when value congruence was low and high, whereas the employees with low POS and LMX reported low satisfaction when value congruence was low, and high levels of satisfaction when value congruence was high. Similarly, Bakker *et al.* (2007) reported that high job resources buffered the negative effects of pupil misbehaviors on teachers' work engagement.

In contrast to the buffering-hypothesis, the intensifying-hypothesis proposes that employees who have high-quality social exchange relationships with their organizations are more sensitive to contract breach (Coyle-Shapiro, 2002; Restubog and Bordia, 2006). Since employees with high-quality social exchanges may have become more committed to their organizations (Masterson *et al.*, 2000), and are less likely to leave the organization (Tekleab *et al.*, 2005), psychological contract breach inflicts severe damages on their relationship with the organization. This is consistent with arguments provided by Robinson and Rousseau (1994): employees placing greater value on the employment

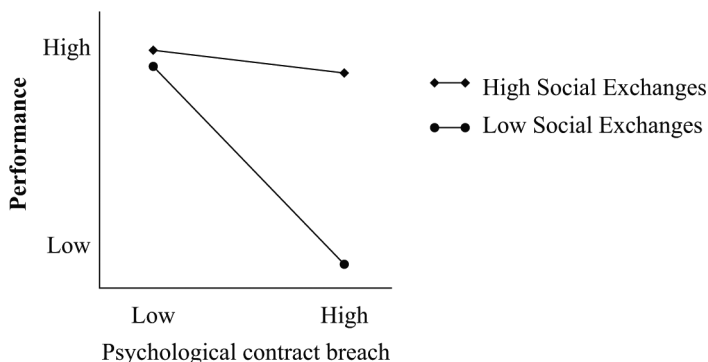


Figure 1.
Buffering hypothesis:
hypothetical interaction
between psychological
contract breach and social
exchanges on performance

relationship are more negatively influenced by contract breaches than those for whom the employment relationship is of marginal importance. For employees with high social exchanges, the way the organization treats the employee becomes important and consequential (Elangovan and Shapiro, 1998; Kwong and Leung, 2002). Hence, they feel more betrayed by contract breaches than employees with low social exchanges (Robinson and Morrison, 1995). As a result, these employees reciprocate to breaches by reducing their job performance and diminishing discretionary efforts (OCBs; Turnley *et al.*, 2003). Employees with poor-quality social exchanges may already have lower expectations of their organization; contract breach may be yet another signal that the organization does not provide the employee with sufficient resources in the job, and does not value the employee as member of the organization (Aselage and Eisenberger, 2003). Therefore, the impact of psychological contract breach among employees with weak social exchanges may be less severe than for those with strong social exchanges.

Support for the intensifying-hypothesis stems, for instance, from studies such as the one provided by Zhang and colleagues (Zhang *et al.*, 2008). Specifically, the relationship between supervisory support and trust in the organization was strongly positive for people with high quality employment relationships, in contrast to employees with a weak employment relationship. Therefore, psychological contract breach and high social exchanges may influence work performance more strongly than a combination of contract breach absence and low social exchanges. Furthermore, employees with low social exchanges may already be among the less performing employees (in particular with respect to OCBs), regardless of the level of contract breach. This is indicated by the main effects of social exchange variables on job performance, as shown in a number of empirical studies and meta-analyses (Dirks and Ferrin, 2002; Gerstner and Day, 1997; Rhoades and Eisenberger, 2002; Tsui *et al.*, 1997). Therefore, when psychological contract breach is absent (or when the psychological contract is fulfilled), employees with high social exchanges have a higher work performance than employees with low social exchanges.

The intensifying-hypothesis is depicted in Figure 2. As indicated, the slope of the low social exchange employees is essentially flat across low and high levels of breach: these employees' performance will remain largely unaffected; conversely, the slope of the high social exchange employees is strongly negative. Perceived breach will have a strong negative impact on performance.

Both theory-based hypotheses have received empirical support (buffering-hypothesis: Robinson, 1996; intensifying-hypothesis: Restubog and Bordia, 2006). However, we

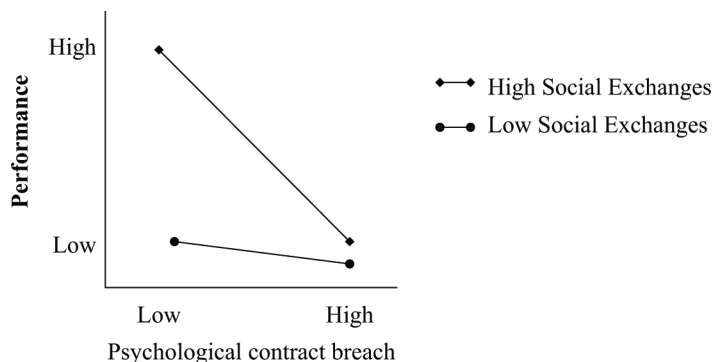


Figure 2.
Intensifying hypothesis:
hypothetical interaction
between psychological
contract breach and social
exchanges on performance

expect the intensifying-hypothesis to be most applicable to the current study. Psychological contract breach refers to perceptions of a profound damage to the employment relationship between the employee and organization (Conway and Briner, 2005; Rousseau, 1995), and may cause a revision of one's relationship with the organization and its agents (Morrison and Robinson, 1997). In line with previous work on the effects of 'betrayal' (Elangovan and Shapiro, 1998; Restubog and Bordia, 2006), employees connected through stronger social exchanges and bonds to their organization, feel the betrayal more intensively, as opposed to those with weaker and transactional social exchanges. This is precisely because contract breach is in sharp contrast with the belief employees have about their high-quality relationship with their organization. Hence, these employees reciprocate by a stronger reduction of work and discretionary effort. In the next section, we elaborate on the interactive effects of social exchanges (specified as social exchange relationship, perceived organizational support, and trust in the organization) through the intensifying-hypothesis lens.

Social exchange relationships

Social exchange relationships are defined as perceptions of the obligations between employee and organization, based on mutual investment in the relationship, a long-term duration, and the emphasis on non-financial exchanges (Blau, 1964; Shore *et al.*, 2006). The social exchange relation reflects the socio-emotional aspects of the employment relationship, and thus the perceived quality of the employment relationship (Blau, 1964, pp. 91-3). According to Morrison and Robinson (1997), contract breaches function as a trigger for a cognitive sense-making process. As stated above, people with strong social exchange relationships may feel particularly betrayed when the organization breaks its side of the psychological contract, damaging the long-term exchange relationship employees establish with their organizations (Dulac *et al.*, 2008). Consequently, they reduce their work efforts to a level that is comparable to the inducements the organization has given.

- H2.* Social exchange relationships will moderate the relation between psychological contract breach and (a) job performance and (b) organizational citizenship behaviors. Specifically, high social exchange relationships accentuate the negative relationship between breach and behavioral outcomes.

Perceived organizational support (POS)

Perceived organizational support is defined as the employees' belief concerning the extent to which the organization cares about them and values their contributions to the organization (Aselage and Eisenberger, 2003; Rhoades and Eisenberger, 2002). Support from the organization bolsters employees' self-esteem and gives the employee the feeling that the employer values them. Absence of contract breach, or high contract fulfillment, creates a positive spiral in which employees reciprocate and increase the effort put in the job. However, contract breach among people with high POS may cause feelings of betrayal, because the support they received was not in line with the psychological contract they had with their organization. Consequently, they restore the imbalance by reducing work effort, in line with the norm of reciprocity (Gouldner, 1960) and negative reciprocation (Eisenberger *et al.*, 2004).

- H3. POS will moderate the relation between psychological contract breach and (a) job performance and (b) organizational citizenship behaviors. Specifically, high POS accentuates the negative relationship between breach and behavioral outcomes.

Trust in the organization

Trust and mutual obligations are two closely interlinked concepts (Blau, 1964, p. 99; Guest, 2004). Trust is especially built when two parties reciprocate mutual obligations over a certain period, creating an exchange relationship (Blau, 1964; Coyle-Shapiro and Conway, 2004). Experiences of psychological contract breach should depend on social and psychological factors specific to the employment relationship in which it occurs (Morrison and Robinson, 1997; Robinson, 1996). According to prior definitions, trust is an individual propensity to trust, combined with an individual's expectations about a trustee's future behavior (Dunn and Schweitzer, 2005; Mayer *et al.*, 1995). Formally stated, A trusts B if A displays behavior towards B on account of which B would be able to hurt/violate A's interests (Bhattacharya *et al.*, 1998). Researchers have used selective interpretation arguments to argue that employees perceive breaches through the existing levels of trust they have in their organization. Indeed, Robinson (1996) found that trust moderates the relation between contract breach and future trust. When deciding on how much effort to engage in for the organization, the effects of contract breach depend on the level of trust in the organization: employees who perceive high trust will feel more betrayed and consequently reduce their work and discretionary efforts. As proposed by Mayer *et al.* (1995), when the organization has broken the psychological contract, employees experience higher risks in trusting their employer. Hence, they take less risk in the existing relationship, and diminish job performance and discretionary behaviors. Therefore, the fourth hypothesis is:

- H4. Trust in the organization will moderate the relation between psychological contract breach and (a) job performance and (b) organizational citizenship behaviors. Specifically, high trust accentuates the negative relationship between breach and behavioral outcomes.

Method

Sample and procedure

We collected data from a service organization situated in the Mid-Atlantic region of the USA. In existence since the early 1970s, the company is functionally organized, with units responsible for specific market segments, supported by human resource, information technology, and other units. The organization has a well-developed internal labor market and predictable levels of growth from year to year. Stability in the organizational environment (e.g. an internal labor market with clear career paths for advancement) may increase the likelihood that employees expect support from the organization and engage in social exchanges to a greater extent than in other settings. For the same reason, employees may be more sensitive to psychological contract breaches or violations than in less stable organizational settings.

Study participants were in professional positions (administrative and operations), with more than 75 percent of them in non-supervisory jobs, including administrative assistants, analysts, engineers, and technical workers. Based on the O*NET system of job classification (Mumford and Peterson, 1999), employees were involved in tasks with

moderate to high levels of autonomy and interdependence. We collected the data using self-report questionnaires, based on 266 employees who completed the survey (response rate of 53.2 percent). Of the 266 participants, 79 percent were men, 69 percent had at least some college education, 81 percent were 30 years or older, 75 percent had worked for the organization for more than three years, and 82 percent had been on the current position for more than a year. We were interested to measure both work performance and discretionary behaviors in the form of citizenship. Since psychological contract breach refers to organizational failure to meet its obligations, we expected that reactions to breach will predict organization-directed citizenship behaviors (Lavelle *et al.*, 2007).

Measures

We used previously published scales to collect data relevant for the study. All measures were assessed using a five-point Likert-type scale (1 = strongly disagree; 2 = disagree; 3 = neither agree nor disagree; 4 = agree; and 5 = strongly agree).

Psychological contract breach. In previous research, two different measures have been developed to investigate psychological contract breach (Zhao *et al.*, 2007). On the one hand, content-specific measures include items referring to specific employer promises (e.g. pay), and measure employees' perceptions of breach of these specific promises. On the other hand, global scales have been developed that measure global assessments of perceptions of breach of promises (Robinson and Morrison, 2000). According to Zhao *et al.* (2007), global scales have an advantage over specific scales when the research focus is not on a particular type of content, as was the case in the current study. Global scales capture the full domain of psychological contract content, and by responding to global scales, respondents may unconsciously weigh the importance of the promises, which has been identified as important aspect of contract breaches (Conway and Briner, 2005; Zhao *et al.*, 2007). Finally, content-specific measures may overlook important obligations between employees and organizations because not every obligation can be measured (Conway and Briner, 2005). Therefore, in this study we chose for global psychological contract breach scales.

We used explicit questions asking the extent to which the organization fulfilled or broken its obligations to the employees (Robinson and Morrison, 1995; Robinson and Rousseau, 1994). The scale contained eight items from Robinson and Morrison (2000). Examples of items are: "Overall, [the organization] has fulfilled its commitment to me" (reverse coded), and "[The organization] has broken many of its promises to me even though I've upheld my side of the deal". We estimated the internal reliability using Cronbach's alpha (0.89). The scale has been validated in previous research and negative relations have been found with employee performance (Robinson and Morrison, 2000).

Social exchange relationships. Participants were asked to respond to items asking them to describe the nature of the exchange relationships underlying their psychological contract. Shore *et al.* (1999) provided a scale to measure the degree to which employees have social exchanges with their employer. The construct validity has been presented in previous research (Shore *et al.*, 2006) with high reliabilities (Cronbach's alphas of 0.86 and 0.87). Shore *et al.* (2006) found positive relationships with performance and OCBs. The items capture the exchange process rather than the specific content of the psychological contract. Seven items were used to assess a social exchange relationships. An item reads, "I don't mind working hard today – I know I will eventually be rewarded by [the organization]." Cronbach's alpha for the scale was 0.83.

Perceived organizational support. Perceived organizational support ($\alpha = 0.91$) was assessed using an eight-item scale (e.g. "Help is available from the organization when I have a problem") taken from Eisenberger *et al.* (1986). This scale has been validated and found to be reliable and positively related to performance and OCBs (Byrne and Hochwarter, 2008).

Trust in the organization. The seven-item trust in organization scale was taken from Robinson and Rousseau (1994), stemming originally from Gabarro and Athos (1976; $\alpha = 0.80$). Robinson and Rousseau (1994) reported a high reliability of the scale ($\alpha = 0.93$). A sample item is, "My organization is open and upfront with me." In the current study Cronbach's alpha was 0.80.

Job performance. Job performance was measured using the four-item in-role behavior scale provided by Williams and Anderson (1991; $\alpha = 0.86$). An example of an item is "I meet the performance requirements of the job." Williams and Anderson (1991) found strong empirical support for the distinction between in-role performance and citizenship behaviors.

Organizational citizenship behaviors. Organization-focused citizenship behaviors were measured using the nine-item scale provided by Williams and Anderson (1991; e.g. "I adhere to informal rules to maintain order"). Cronbach's alpha for this scale in our study was 0.90.

Control variables. Based on previous studies investigating similar relationships (Kickul and Lester, 2001; Robinson, 1996; Rousseau, 1995; Turnley *et al.*, 2003), we controlled for gender (1 = male, 2 = female), length of employment (measured as employees' tenure with the organization, in years), and educational level.

Statistical analyses

To assess the construct validity of the independent variables, confirmatory factor analyses were conducted using Lisrel 8.72 (Jöreskog and Sörbom, 2005). The four-factor model, including psychological contract breach, SER, POS, and trust in the organization reached good fit ($\chi^2 = 692.05$, $df = 388$, $p < 0.001$; RMSEA = 0.05; CFI = 0.98). Moreover, the four-factor model fitted significantly better than a two-factor model, consisting of a contract breach factor and a factor of the other three social exchange variables, ($\Delta\chi^2 = 837.29$; $\Delta df = 5$; $p < 0.001$), as well a single-factor model, including all items ($\Delta\chi^2 = 1846.01$; $\Delta df = 6$; $p < 0.001$).

The hypotheses were tested using moderated hierarchical regression analyses. The independent variables were centered before interactions were calculated (Aiken and West, 1991). In the analyses, in the first step, gender, tenure, and education were added to the model. Subsequently, the main effects were added in the second step and in the final step the interactions. Since researchers have stated that interactive effects are harder to detect, especially in field studies, an alpha level of 0.10 was used to estimate significant interactive effects (Aguinis, 2002; Aguinis *et al.*, 2005). Although both the buffering- and intensifying-hypothesis require the same statistical testing of interactions (Aiken and West, 1991), the method does not reflect the differences in direction incorporated in the two hypotheses. Therefore, the patterns of the interactions are plotted, to investigate which hypothesis is supported for this study. Moreover, following the methods of Aiken and West (1991), we calculated the simple slopes of the interactive effects one standard deviation below and above the mean to test the aforementioned hypotheses. The correlations between the variable under study are shown in Table I.

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1 Gender	1.20	0.40	–								
2 Tenure	3.97	1.70	–0.16	–							
3 Education	2.23	1.19	0.06	–0.18	–						
4 Psychological contract breach	2.54	0.71	0.03	0.02	–0.05	0.89					
5 Perceived organizational support	3.17	0.86	0.11	–0.11	–0.05	–0.49	0.91				
6 Trust in the organization	3.27	0.71	0.06	–0.13	0.04	–0.59	0.68	0.80			
7 Social exchange relationships	3.39	0.67	–0.00	–0.03	–0.03	–0.45	0.57	0.56	0.83		
8 In – role behaviors	4.54	0.59	–0.01	–0.07	–0.02	–0.19	0.14	0.20	0.13	0.87	
9 OCBs	3.86	0.77	0.03	0.10	–0.01	–0.20	0.30	0.25	0.18	0.28	0.90

Notes: *n*=266. Correlation coefficients greater than +/- 0.13 are significant at $p < 0.05$. Correlation coefficients greater than ± 0.17 are significant at $p < 0.01$. Values in italics along the main diagonal are coefficient alphas for scaled variables. OCBs = Organizational citizenship behaviors

Table I.
Descriptive statistics,
zero-order correlations,
and Cronbach's alphas

To check whether multicollinearity posed a threat to the findings, VIF (Variance Inflation Factor) statistics were calculated for each separate regression analysis (Morrow-Howell, 1994). If square root VIF statistics are above 2, the precision of the parameter statistics may be impaired by multicollinearity. The analyses showed that for all regressions the VIF statistic were not higher than 1.6. Therefore, the results suggest that multicollinearity is unlikely to impair (or may not) the precision of the statistics in the current study.

Results

H1. Contract breach will be negatively related to work performance

The results of the first hypothesis are shown in Table I. Psychological contract breach is negatively correlated with both in-role behaviors ($r = -0.19, p < 0.01$) and organizational citizenship behaviors ($r = -0.20, p < 0.01$). Therefore, both *H1a* and *H1b* are supported.

H2. SER will moderate the relationship between contract breach and performance and OCBs

The results of the second hypothesis are shown in Table II. SER moderated the relationship between contract breach and in-role behaviors significantly ($\beta = -0.13, p < 0.05, \Delta R^2 = 0.02$). The interaction effect is plotted in Figure 3. As predicted by our intensifying-hypothesis, the low-SER employees had lower performance levels when contract breach was low. The slope for the low-SER employees was not significant ($\beta = -0.09, ns$), whereas the slope for the high SER-employees was strongly negative ($\beta = -0.30, p < 0.001$).

Moreover, SER moderated the relation between contract breach and OCB significantly ($\beta = -0.12, p < 0.10, \Delta R^2 = 0.01$). The interaction is graphically represented in Figure 4. The simple slope for the low SER-employees was not significant ($\beta = -0.08, ns$), whereas the simple slope for the high SER-employees was negative ($\beta = -0.27, p < 0.01$). The pattern supported the intensifying-hypothesis. In sum, both *H2a* and *H2b* are supported.

H3. POS will moderate the relationship between contract breach and performance and OCBs

The results of the third hypothesis are shown in Table II. POS moderated the relation between contract breach and in-role behaviors significantly ($\beta = -0.19, p < 0.01, \Delta R^2 = 0.04$). The graphical representation of the interaction effect is shown in Figure 5. The slope for the low POS-employees was not significant ($\beta = -0.05, ns$), whereas the slope for the high POS-employees was strongly negative ($\beta = -0.39, p < 0.001$).

POS also significantly moderated the relation between contract breach and OCBs ($\beta = -0.13, p < 0.05, \Delta R^2 = 0.02$). The plot of this interaction is shown in Figure 6. The simple slope for the low POS-employees was insignificant ($\beta = 0.01, ns$), whereas the simple slope for the high POS-employees was negative ($\beta = -0.22, p < 0.05$). Both Figures 5 and 6 show that the intensifying-hypothesis is supported for POS as moderator. In sum, both *H3a* and *H3b* are supported.

	In - role behaviors			Dependent variables			OCBs	
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 2	Step 3
<i>Control variables</i>								
Gender	-0.02	-0.02	-0.02	-0.02	0.05	0.06	0.05	0.06
Tenure	-0.08	-0.07	-0.08	-0.08	0.12	0.12	0.12	0.12
Education	-0.03	-0.04	-0.06	-0.03	0.00	-0.01	0.00	-0.01
<i>Independent variables</i>								
Psychological contract breach (PCB)		-0.17**	-0.20***		-0.15**	-0.17**	-0.15**	-0.17**
Social exchange relationship (SER)		0.04	0.03		0.12	0.11	0.12	0.11
PCB * SER			-0.13**			-0.12**		-0.12**
F	0.56	2.31**	2.68**	0.56	3.63***	3.66**	3.63***	3.66**
ΔF		4.92***	4.36**		7.39***	3.66*	7.39***	3.66*
R^2	0.01	0.04	0.06	0.01	0.07	0.08	0.07	0.08
ΔR^2		0.04	0.02		0.05	0.01	0.05	0.01
<i>Control variables</i>								
Gender	-0.02	-0.02	-0.02	0.05	0.02	0.02	0.02	0.02
Tenure	-0.08	-0.07	-0.09	0.11	0.14**	0.13*	0.14**	0.13*
Education	-0.03	-0.04	-0.06	0.01	0.02	0.01	0.02	0.01
<i>Independent variables</i>								
Psychological contract breach (PCB)		-0.17**	-0.22***		-0.07***	-0.11***	-0.07***	-0.11***
Perceived organizational support (POS)		0.05	0.02**		0.28	0.26**	0.28	0.26**
PCB * POS			-0.19			-0.13*		-0.13*
F	0.56	2.35**	3.64***	1.06	6.56***	6.34***	6.56***	6.34***
ΔF		5.00***	9.73***		14.63***	4.81**	14.63***	4.81**
R^2	0.01	0.04	0.08	0.01	0.11	0.13	0.11	0.13
ΔR^2		0.04	0.04		0.10	0.02	0.10	0.02
<i>Control variables</i>								
Gender	-0.02	-0.02	-0.02	0.05	0.04	0.04	0.04	0.04
Tenure	-0.08	-0.06	-0.07	0.11	0.14**	0.14**	0.14**	0.14**
Education	-0.03	-0.04	-0.06	0.01	-0.00	-0.01	-0.00	-0.01
<i>Independent variables</i>								
Psychological contract breach (PCB)		-0.12	-0.16**		-0.07***	-0.08**	-0.07***	-0.08**
Trust in organization (TRORG)		0.12	0.11**		0.23	0.22**	0.23	0.22**
PCB * TRORG			-0.16**			-0.04		-0.04
F	0.56	2.82**	3.51***	1.06	4.98***	4.19***	4.98***	4.19***
ΔF		6.17***	6.68***		10.72***	0.35	10.72***	0.35
R^2	0.01	0.05	0.08	0.01	0.09	0.09	0.09	0.09
ΔR^2		0.05	0.02		0.08	0.00	0.08	0.00

Notes: Standardized regression coefficients are reported. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$, **** $p < 0.001$

Table II.
Hierarchical regression
analyses predicting
employee performance
and organizational
citizenship behaviors

Figure 3.
Interaction between psychological contract breach and social exchange relationships (SER) on in-role performance

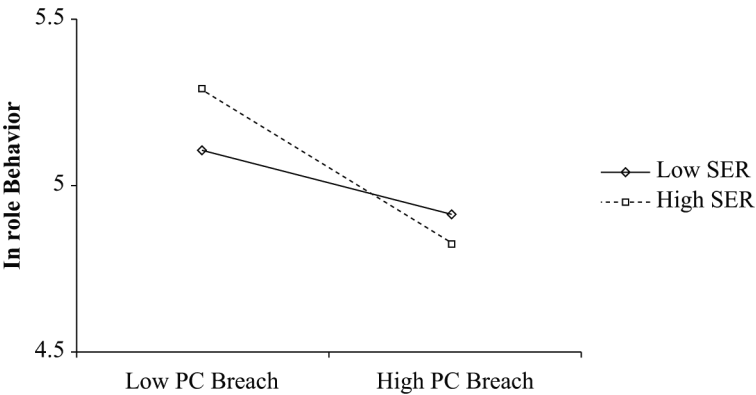


Figure 4.
Interaction between psychological contract breach and social exchange relationships (SER) on organizational citizenship behaviors

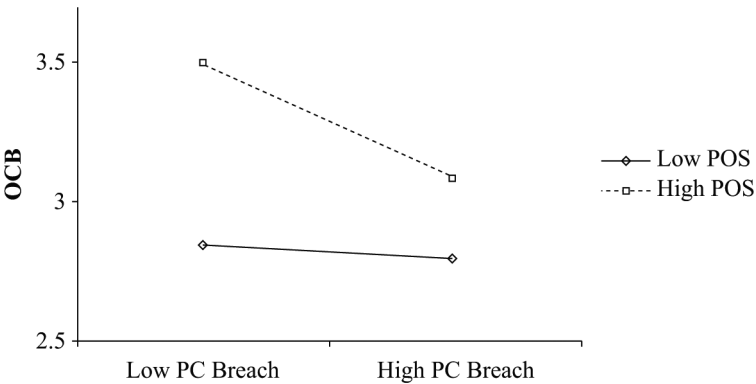
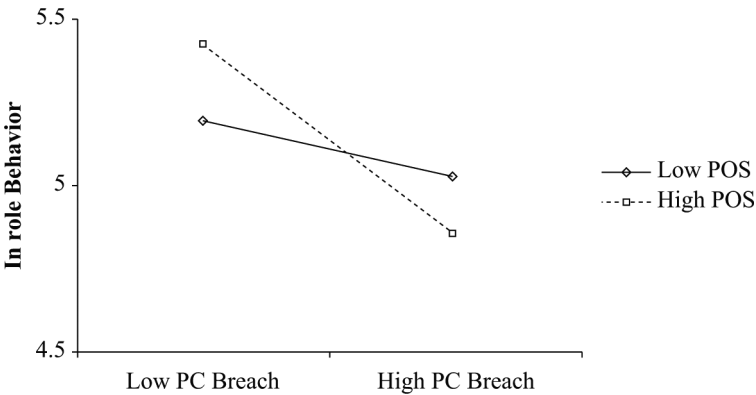


Figure 5.
Interaction between psychological contract breach and perceived organizational support (POS) on in-role performance



($\beta = -0.16, p < 0.01, \Delta R^2 = 0.02$). This interaction effect is graphically presented in Figure 7. The simple slope for the low-trust employees was non-significant ($\beta = -0.03, ns$). The simple slope for the high-trust employees was negative ($\beta = -0.28, p < 0.01$). The pattern of interaction supports the intensifying-hypothesis, indicating stable low levels of performance for low-trust employees and declining performance for high-trust employees when contract breach increases. Contrary to our hypothesis, trust did not moderate the relationship between psychological contract breach and OCBs ($\beta = -0.04, ns$). Therefore, *H4a* is supported and *H4b* is not supported.

To summarize, five out of the six interactions presented a-priori in by our theory were supported, all of them in the expected direction in line with the intensifying-hypothesis. The separate social exchange variables moderated the relationship between psychological contract breach and work behaviors, such that behaviors of employees with low levels of social exchanges were not significantly affected by contract breach, whereas the work behaviors decreased as contract breach increased among the employees with high levels of social exchanges.

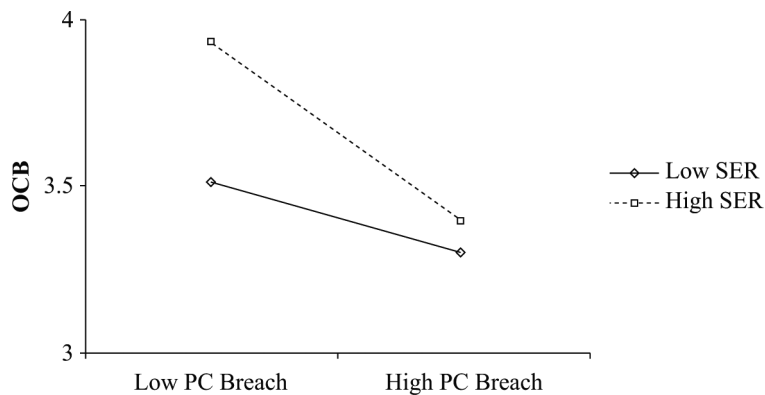


Figure 6.
Interaction between
psychological contract
breach and perceived
organizational support
(POS) on organizational
citizenship behaviors

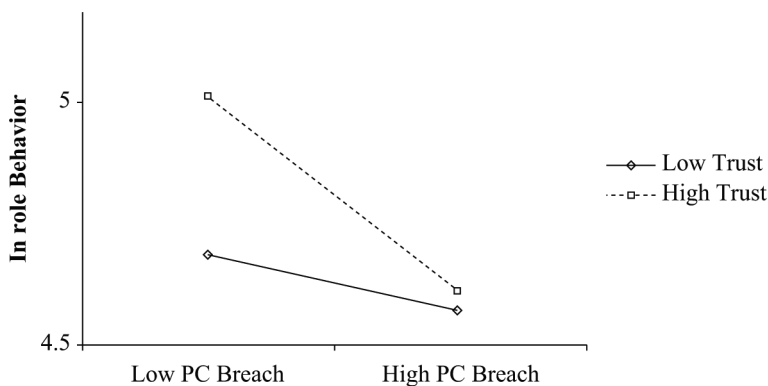


Figure 7.
Interaction between
psychological contract
breach and trust in the
organization on in-role
performance

Discussion

The current study focused on the moderating role of social exchanges in the relation between psychological contract breach and work performance. First, we proposed that psychological contract breach would be negatively related to work performance. We found support for a negative relationship with both job performance and organizational citizenship behaviors, supporting previous research on the effects of psychological contract breach (Coyle-Shapiro, 2002; Turnley *et al.*, 2003; Zhao *et al.*, 2007). Furthermore, we presented two patterns of interactions between psychological contract breach and a number of social exchange variables: one where social exchange buffers the relationship between contract breach and work performance (buffering-hypothesis), and a pattern where social exchange accentuates the relations between contract breach and work performance (intensifying-hypothesis). Based on previous work on betrayal (Elangovan and Shapiro, 1998; Restubog and Bordia, 2006), we proposed that psychological contract breach refers to a profound damage to the employment relationship, and therefore especially those who experience high levels of social exchange feel betrayed, and reciprocate contract breaches by reducing effort on the job.

In this study, we found strong support for the intensifying-hypothesis. An overall five out of six possible interactions were significant, and further analyses showed that the relations of contract breach with work performance were negative for employees with high social exchange (SER, POS, and trust), whereas the same relationship was not significant for employees with low social exchanges. Visual inspection showed that work performance was lower for employees with low social exchanges, regardless of the level of psychological contract breach, whereas performance was higher among high social exchange employees, and it decreased for high levels of psychological contract breach. Overall, this pattern supports the notion that the high social exchange employees feel especially betrayed when their psychological contract has been broken. For employees, with low social exchanges, contract breach is yet another signal that the organization does not care for the employee (Aselage and Eisenberger, 2003; Eisenberger *et al.*, 1986).

Contrary to expectations we found that trust did not moderate the relation between psychological contract breach and OCBs. It might be that whereas SER and POS refer to a straightforward exchange relationship between the employee and the organization, trust refers to a more complex relation between the employee and the organization (Atkinson and Butcher, 2003; Dirks and Ferrin, 2002). More specifically, trust may be based on either task-based competence or personal motives (Atkinson and Butcher, 2003). Atkinson and Butcher argue that when employees' trust in their organization is only based on fulfillment of basic tasks of the organization, employees may have low emotional attachment to the organization. However, if the trusted party (the organization) may contribute to personal motives of the employee, their emotional attachment will be higher and more is at stake in their relationship. An explanation of the current findings might be that employees' trust in the organization was primarily based on task competence, such that psychological contract breach was not related to a stronger decrease of OCBs for those with high trust. If trust is primarily based on fulfillment of personal motives, trust would be a more important component of the relationship between the employee and the organization. Therefore, contract breach would be a more profound damage of this trust-based relationship, leading to more severe effects on OCBs. Future research may shed more light on these different bases of

trust and should investigate the nature of trust in the organization as well as the nature of psychological contract breach.

Theoretical implications

The study contributes to a more sophisticated understanding of the impact of contract breaches on employee behaviors. Although researchers have pointed to potential moderators in these relationships (Morrison and Robinson, 1997; Zhao *et al.*, 2007), there have been very few studies of the specific patterns of interactions between psychological contracts, social exchange, and employee behaviors. Although researchers have mentioned that high-quality relationships between the employee and the organization may buffer the negative effects of contract breach, the current study contributes by showing intensifying effects of high social exchanges. Since in the current study we used a global measure of psychological contract breach, which refers to a profound damage of the employment relationship, therefore a sense of betrayal among those with high social exchange may be most likely (Robinson and Morrison, 2000). On the other hand, we suggest that minor breaches of the psychological contract may be buffered by high social exchanges, in line with the propositions of Morrison and Robinson (1997). When contract breach is perceived as less severe (e.g. not getting a day off when asked), one might attribute it more easily to circumstances, whereas more severe breaches (e.g. not getting a promotion), are more likely to be attributed to deliberate intention of the organization.

The current study contributes to the psychological contract literature by including moderators in the breach-outcome relationship. Individual differences may be a boundary condition of the relationships (e.g. employee cynicism could further attenuate the relationships (Johnson and O'Leary-Kelly, 2003), same with equity sensitivity (Kickul and Lester, 2001)). In this way, the study integrates a contextual perspective into psychological contracts, by investigating how psychological contract affects behaviors in the context of a broader relationship between the employee and the organization. Future studies on the role of social exchanges in psychological contracts between employees and their organizations (Guest, 2004; Morrison and Robinson, 1997) can be extended by considering other plausible outcomes, including intentions (e.g. intention to leave), discretionary behaviors (e.g. voice) and attitudes (e.g. loyalty, neglect; Turnley and Feldman, 1999a).

Finally, although this study has shown that social exchanges play an important contextual role in the effects of contract breaches, other factors in the organization might be important as well. For instance, employees who perceive that their psychological contract has been breached might be treated less fairly than other employees (Guest, 2004). Post-hoc analyses indeed showed that psychological contract breach was related to perceptions of procedural justice ($r = -0.38$, $p < 0.01$), and to distributive justice ($r = -0.32$, $p < 0.01$; measures taken from Colquitt, 2001). This adds to the feelings of betrayal employees may have when they experience contract breaches. One could argue that attributions and justice may play a role as well as moderators in the relations between contract breaches and work behaviors (Turnley and Feldman, 1999b). Indeed, Robinson and Morrison (2000) found that attributions and justice interact with contract breach in relation to feelings of violations. However, Coyle-Shapiro (2002) failed to find significant interactions between contract breach and justice perceptions (procedural and interactional) in explaining OCBs. Thus, it seems that judgments regarding the social exchange relationship with the organization are a

more important contextual factor with respect to the effects of contract breach than justice perceptions.

Limitations and suggestions for further research

This study is not without limitations. First, the data were collected at one point in time for all the variables, and thus causal inferences have to be treated with caution. Although there is strong evidence connecting contract breach with performance outcomes (e.g. Zhao *et al.*, 2007), future research can rely on experimental, quasi-experimental or longitudinal designs, and provide more convincing evidence on causation. Longitudinal data (Robinson and Morrison, 2000) may be particularly useful: measuring employees' levels of performance and discretionary effort at time 1, before determining their views on exchanges and contract breaches (at time 2), and possible modifications of performance behaviors (at a subsequent time) can provide more convincing evidence for one of the configurations presented in Figures 1 and 2.

The fact that data have been collected from one source (Podsakoff *et al.*, 2003; Spector, 2006) is one of the limitations of the study. Even though we used some of the procedural remedies indicated by Podsakoff and co-authors for common source data (e.g. separation of measures in the survey instrument), future studies may be necessary to validate our findings by obtaining data on our outcomes from a different source (coworkers, supervisors). For some of the variables, including breach and the social exchange variables, the focal employees are the best source of information. Future studies may provide measurement of the outcome variables from a different source (e.g. direct supervisor, coworkers; Chiaburu and Harrison, 2008). It should noted, however, that our study was focused on testing a number of interactions, which are less sensitive to data originating from one source (Evans, 1985).

Third, the study was conducted in one organization. Evidence for the generalizability of our findings should be provided in the future by supporting these results in other settings. Finally, we used a global measurement for psychological breach scale and did not seek to separate inducements and obligations differentiated by content (e.g. Coyle-Shapiro and Conway, 2005). Examining in more detail whether our findings are consistent across types of obligations the employers did not fulfill will allow for increased model specification and more precise predictions.

Although our theory-based arguments for how social exchanges modify the contract breach to performance relationship are consistent with prior research outlining the importance of cognitions (e.g. Robinson, 1996), some of these cognitive mechanisms are not explicitly captured in the model. Do employees engage in these types of judgments because they are cognitively motivated to reach specific outcomes, or because of the use of preferred thinking strategies (see Molden and Higgins, 2005, for a review)? Future work in this distinction has theoretical and practical merit, as it can determine how employees form, retain, and modify impressions related to their contracts and exchanges.

Practical implications

The current study has practical implications for organizations. First, we show that when employees perceive that the organization does not fulfill its promises and obligations, employees reciprocate by reducing their efforts in the job. Psychological contract breach was negatively related to both job performance and OCBs. However,

these effects are strongest among the employees who have high perceptions of social exchange relationships, organizational support, and trust in the organization. In general, organizations try to establish long-term relationships with their employees by providing them with support and building strong relationships between the organization and the employee. However, the effects of the effort organizations put in building these strong relationships with their employees may be diminished by employees' perceptions of contract breaches. Both task performance and discretionary behaviors will suffer when employees perceive a breach in their psychological contract. To prevent these negative consequences, organizations should diminish contract breaches. This can be done by providing employees with realistic expectations rather than make unrealistic promises, and periodically reassess the extent to which employees and the organization (or their representing leaders) are "on the same page" (Tekleab and Taylor, 2003). However, it may be problematic for organizations to attract new employees when they provide realistic expectations; organizations are more inclined to offer high inducements in order to attract highly educated and skilled employees. Moreover, organizations should also focus on breach-sensitive matters, such as promotions, rewards, content of the job, and development. Breaches may be diminished by emphasizing just procedures and equity in these breach-sensitive matters. Employees might perceive less contract breach if the organization carries out its procedures in a fair way. Organizations should be aware that implementing these carry costs, in terms of money, investments and effort. All in all, both task and contextual performance are higher when employees have strong social exchanges and perceive low contract breach. For organizations, it is advantageous to invest in trust among employees as well as a sound psychological contract with employees.

Conclusion

This paper showed that there are two theoretical meaningful interactions between psychological contracts and social exchanges. The results showed strong support for the intensifying-hypothesis, which stated that especially employees with high social exchanges feel betrayed by their organizations when their psychological contracts have been broken. To reciprocate the contract breach, they diminish their efforts, thus negatively impacting job performance and OCBs. Our results reveal important boundary conditions in the relations between contract breach and work performance.

References

- Aguinis, H. (2002), "Estimation of interaction effects in organizational studies", *Organizational Research Methods*, Vol. 5 No. 3, pp. 207-11.
- Aguinis, H., Beaty, J.C., Boik, R.J. and Pierce, C.A. (2005), "Effect size and power in assessing moderating effects in categorical variables using multiple regression: a 30-year review", *Journal of Applied Psychology*, Vol. 90 No. 1, pp. 94-107.
- Aiken, L.S. and West, S.G. (1991), *Multiple Regression: Testing and Interpreting Interactions*, Sage Publications, San Francisco, CA.
- Aselage, J. and Eisenberger, R. (2003), "Perceived organizational support and psychological contracts: a theoretical integration", *Journal of Organizational Behavior*, Vol. 24, pp. 491-509.
- Atkinson, S. and Butcher, D. (2003), "Trust in managerial relationships", *Journal of Managerial Psychology*, Vol. 18 No. 4, pp. 282-304.

- Bakker, A.B., Hakanen, J.J., Demerouti, E. and Xanthopoulou, D. (2007), "Job resources boost work engagement, particularly when job demands are high", *Journal of Educational Psychology*, Vol. 99 No. 2, pp. 274-84.
- Bhattacharya, R., Devinney, T.M. and Pillutla, M.M. (1998), "A formal model of trust based on outcomes", *Academy of Management Review*, Vol. 23 No. 3, pp. 459-72.
- Blau, P.M. (1964), *Exchange and Power in Social Life*, John Wiley & Sons, New York, NY.
- Byrne, Z.S. and Hochwarter, W.A. (2008), "Perceived organizational support and performance: relationships across levels of organizational cynicism", *Journal of Managerial Psychology*, Vol. 23 No. 1, pp. 54-72.
- Chiaburu, D.S. and Harrison, D.A. (2008), "Do coworkers make the place? Conceptual synthesis and meta-analysis of lateral social influences on perceptions, attitudes, OCBs, and performance", *Journal of Applied Psychology*, Vol. 93 No. 5, pp. 1082-103.
- Colquitt, J.A. (2001), "On the dimensionality of organizational justice: a construct validation measure", *Journal of Applied Psychology*, Vol. 86 No. 3, pp. 386-400.
- Conway, N. and Briner, R.B. (2005), *Understanding Psychological Contracts at Work. A Critical Evaluation of Theory and Research*, Oxford University Press, Oxford.
- Coyle-Shapiro, J.A.M. (2002), "A psychological contract perspective on organizational citizenship behaviors", *Journal of Organizational Behavior*, Vol. 23, pp. 927-46.
- Coyle-Shapiro, J.A.M. and Conway, N. (2004), "The employment relationship through the lens of social exchange", in Coyle-Shapiro, J.A.M., Shore, L.M., Taylor, M.S. and Tetrick, L.E. (Eds), *The Employment Relationship. Examining Psychological and Contextual Perspectives*, Oxford University Press, Oxford, UK, pp. 5-28.
- Coyle-Shapiro, J.A.M. and Conway, N. (2005), "Exchange relationships: examining psychological contracts and perceived organizational support", *Journal of Applied Psychology*, Vol. 90 No. 4, pp. 774-81.
- Cropanzano, R. and Mitchell, M.S. (2005), "Social exchange theory: an interdisciplinary review", *Journal of Management*, Vol. 31 No. 6, pp. 874-900.
- Dirks, K.T. and Ferrin, D.L. (2002), "Trust in leadership: meta-analytic findings and implications for research and practice", *Journal of Applied Psychology*, Vol. 87 No. 4, pp. 611-28.
- Dulac, T., Coyle-Shapiro, J.A.M., Henderson, D.J. and Wayne, S.J. (2008), "Not all responses to breach are the same: the interconnection of social exchange and psychological contract processes in organizations", *Academy of Management Journal*, Vol. 51 No. 6, pp. 1079-98.
- Dunn, J.R. and Schweitzer, M.E. (2005), "Feeling and believing: the influence of emotion and trust", *Journal of Personality and Social Psychology*, Vol. 88 No. 5, pp. 736-48.
- Eisenberger, R., Huntington, R., Hutchinson, S. and Sowa, D. (1986), "Perceived organizational support", *Journal of Applied Psychology*, Vol. 71 No. 3, pp. 500-7.
- Eisenberger, R., Lynch, P., Aselage, J. and Rohdieck, S. (2004), "Who takes the most revenge? Individual differences in negative reciprocity norm endorsement", *Personality and Social Psychology Bulletin*, Vol. 30 No. 6, pp. 787-99.
- Elangovan, A.R. and Shapiro, D.L. (1998), "Betrayal of trust in organizations", *Academy of Management Review*, Vol. 23 No. 3, pp. 547-66.
- Erdogan, B., Kraimer, M.L. and Liden, R.C. (2004), "Work value congruence and intrinsic career success: the compensatory roles of leader-member exchange and perceived organizational support", *Personnel Psychology*, Vol. 57, pp. 305-32.
- Evans, M.G. (1985), "A Monte Carlo study of the effects of correlated method variance in moderated multiple regression analysis", *Organizational Behavior and Human Decision Processes*, Vol. 36, pp. 305-23.

- Gabarro, J.J. and Athos, J. (1976), *Interpersonal Relations and Communications*, Prentice-Hall, New York, NY.
- Gerstner, C.R. and Day, D.V. (1997), "Meta-analytic review of leader-member exchange theory: correlates and construct issues", *Journal of Applied Psychology*, Vol. 82 No. 6, pp. 827-44.
- Gouldner, A.W. (1960), "The norm of reciprocity: a preliminary statement", *American Sociological Review*, Vol. 25 No. 2, pp. 161-78.
- Guest, D.E. (1998), "Is the psychological contract worth taking seriously?", *Journal of Organizational Behavior*, Vol. 19, pp. 649-64.
- Guest, D.E. (2004), "The psychology of the employment relationship: an analysis based on the psychological contract", *Applied Psychology: An International Review*, Vol. 53 No. 4, pp. 541-55.
- Johnson, J.L. and O'Leary-Kelly, A.M. (2003), "The effects of psychological contract breach and organizational cynicism: not all social exchange violations are created equal", *Journal of Organizational Behavior*, Vol. 24, pp. 627-47.
- Jöreskog, K. and Sörbom, D. (2005), *Lisrel 8.72*, Scientific Software International, Chicago, IL.
- Kickul, J. and Lester, S.W. (2001), "Broken promises: equity sensitivity as a moderator between psychological contract breach and employee attitudes and behavior", *Journal of Business and Psychology*, Vol. 16 No. 2, pp. 191-218.
- Kwong, J.Y.Y. and Leung, K. (2002), "A moderator of the interaction effect of procedural justice and outcome favorability: importance of the relationship", *Organizational Behavior and Human Decision Processes*, Vol. 87 No. 2, pp. 278-99.
- Lavelle, J.J., Rupp, D.E. and Brockner, J. (2007), "Taking a multifoci approach to the study of justice, social exchange, and citizenship behavior: the target similarity model", *Journal of Management*, Vol. 33 No. 6, pp. 841-66.
- Masterson, S.S., Lewis, K., Goldman, B.M. and Taylor, M.S. (2000), "Integrating justice and social exchange: the differing effects of fair procedures and treatment on work relationships", *Academy of Management Journal*, Vol. 43 No. 4, pp. 738-48.
- Mayer, R.C., Davis, J.H. and Schoorman, F.D. (1995), "An integrative model of organizational trust", *Academy of Management Review*, Vol. 20 No. 3, pp. 709-34.
- Molden, D.C. and Higgins, E.T. (2005), "Motivated thinking", in Holyoak, K.J. and Morrison, R.G. (Eds), *Cambridge Handbook of Thinking and Reasoning*, Cambridge University Press, New York, NY, pp. 295-317.
- Morrison, E.W. and Robinson, S.L. (1997), "When employees feel betrayed: a model of how psychological contract violation develops", *Academy of Management Review*, Vol. 22 No. 1, pp. 226-56.
- Morrow-Hollow, N. (1994), "The M-word: multicollinearity in multiple regression", *Social Work Research*, Vol. 18 No. 4, pp. 247-51.
- Mumford, M.D. and Peterson, N.G. (1999), "The O*NET content model: structural considerations in designing jobs", in Peterson, N.G., Mumford, M.D., Borman, W.C., Jeanneret, P.R. and Fleishman, E.A. (Eds), *An Occupational Information System for the 21st Century: The Development of O*NET*, American Psychological Association, Washington, DC, pp. 21-30.
- Organ, D.W. (1988), *Organizational Citizenship Behavior: The Good Soldier Syndrome*, Lexington Books, Lexington, MA.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.-Y. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88, pp. 879-903.
- Restubog, S.L.D. and Bordia, P. (2006), "Workplace familism and psychological contract breach in the Philippines", *Applied Psychology: An International Review*, Vol. 55 No. 4, pp. 563-85.

- Rhoades, L. and Eisenberger, E. (2002), "Perceived organizational support: a review of the literature", *Journal of Applied Psychology*, Vol. 87 No. 4, pp. 698-714.
- Robinson, S.L. (1996), "Trust and breach of the psychological contract", *Administrative Science Quarterly*, Vol. 41 No. 4, pp. 574-99.
- Robinson, S.L. and Morrison, E.W. (1995), "Psychological contracts and OCB: the effects of unfulfilled obligations on civic virtue behavior", *Journal of Organizational Behavior*, Vol. 16 No. 3, pp. 289-98.
- Robinson, S.L. and Morrison, E.W. (2000), "The development of psychological contract breach and violation: a longitudinal study", *Journal of Organizational Behavior*, Vol. 21, pp. 525-46.
- Robinson, S.L. and Rousseau, D.M. (1994), "Violating the psychological contract: not the exception but the norm", *Journal of Organizational Behavior*, Vol. 15 No. 3, pp. 245-59.
- Rousseau, D.M. (1995), *Psychological Contracts in Organizations. Understanding Written and Unwritten Agreements*, Sage, Thousand Oaks, CA.
- Spector, P.E. (2006), "Method variance in organizational research: truth or urban legend?", *Organizational Research Methods*, Vol. 9, pp. 221-32.
- Shore, L.M., Tetrick, L.E. and Barksdale, K. (1999), "Measurement of transactional and exchange relationships", paper presented at the Annual Meeting of the Society for Industrial and Organizational Psychology (SIOP), Atlanta, GA.
- Shore, L.M., Tetrick, L.E., Lynch, P. and Barksdale, K. (2006), "Social and economic exchange: construct development and validation", *Journal of Applied Social Psychology*, Vol. 36 No. 4, pp. 837-67.
- Shore, L.M., Tetrick, L.E., Taylor, M.S., Coyle-Shapiro, J.A.M., Liden, R.C. and Parks, J.M. (2004), "The employee-organization relationship: a timely concept in a period of transition", in Martocchio, J.J. (Ed.), *Research in Personnel and Human Resources Management*, Elsevier, Oxford, pp. 291-370.
- Suazo, M.M., Martínez, P.G. and Sandoval, R. (2009), "Creating psychological and legal contracts through human resource practices: a signaling theory perspective", *Human Resource Management Review*, Vol. 19 No. 2, pp. 154-66.
- Tekleab, A.G. and Chiaburu, D.S. (2004), "Integrating social exchange relationship constructs: evaluation of antecedents and outcomes", paper presented at the annual conference of the Society for Industrial and Organizational Psychology (SIOP), Chicago, IL.
- Tekleab, A.G. and Taylor, M.S. (2003), "Aren't there two parties in an employment relationship? Antecedents and consequences of organization-employee agreement on contract obligations and violations", *Journal of Organizational Behavior*, Vol. 24, pp. 585-608.
- Tekleab, A.G., Takeuchi, R. and Taylor, M.S. (2005), "Extending the chain of relationships among organizational justice, social exchange, and employee reactions: the role of contract violations", *Academy of Management Journal*, Vol. 48 No. 1, pp. 146-57.
- Tsui, A.S., Pearce, J.L., Porter, L.W. and Tripoli, A.M. (1997), "Alternative approaches to the employee-organization relationship: does investment in employees pay off?", *Academy of Management Journal*, Vol. 40 No. 5, pp. 1089-121.
- Turnley, W.H. and Feldman, D.C. (1999a), "The impact of psychological contract violations on exit, voice, loyalty, and neglect", *Human Relations*, Vol. 52 No. 7, pp. 895-922.
- Turnley, W.H. and Feldman, D.C. (1999b), "A discrepancy model of psychological contract violations", *Human Resource Management Review*, Vol. 9 No. 3, pp. 367-86.
- Turnley, W.H., Bolino, M.C., Lester, S.W. and Bloodgood, J.M. (2003), "The impact of psychological contract fulfillment on the performance of in-role and organizational citizenship behaviors", *Journal of Management*, Vol. 29 No. 2, pp. 187-206.

- Wayne, S.J., Shore, L.M. and Liden, R.C. (1997), "Perceived organizational support and leader-member exchange: a social exchange perspective", *Academy of Management Journal*, Vol. 40 No. 1, pp. 82-111.
- Williams, L.J. and Anderson, S.E. (1991), "Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors", *Journal of Management*, Vol. 17 No. 3, pp. 601-17.
- Zhang, A.Y., Tsui, A.S., Song, L.J., Li, C. and Jia, A.L. (2008), "How do I trust thee? The employee-organization relationship, supervisory support, and middle manager trust in the organization", *Human Resource Management*, Vol. 47 No. 1, pp. 111-32.
- Zhao, H., Wayne, S.J., Glibkowski, B.C. and Bravo, J. (2007), "The impact of psychological contract breach on work-related outcomes: a meta-analysis", *Personnel Psychology*, Vol. 60, pp. 647-80.

Further reading

- Bal, P.M., De Lange, A.H., Jansen, P.G.W. and Van der Velde, M.E.G. (2008), "Psychological contract breach and job attitudes: a meta-analysis of age as a moderator", *Journal of Vocational Behavior*, Vol. 72 No. 1, pp. 143-58.
- Lambert, L.S., Edwards, J.R. and Cable, D.M. (2003), "Breach and fulfillment of the psychological contract: a comparison of traditional and expanded views", *Personnel Psychology*, Vol. 56, pp. 895-934.
- Lo, S. and Aryee, S. (2003), "Psychological contract breach in a Chinese context: an integrative approach", *Journal of Management Studies*, Vol. 40 No. 4, pp. 1005-20.

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